CLAIMS:

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- 1. Polyphase filter comprising at least two filters for filtering signals, characterized in that said filters are coupled to integrators for integrating filtered signals.
- 2. Polyphase filter according to claim 1, wherein an output of an integrator is
  5 coupled via a conductance element to an input of a previous integrator.
  - 3. Polyphase filter according to claim 2, wherein an output of an integrator is coupled via a capacitor to an input of a next integrator.
- 10 4. Polyphase filter according to claim 3, wherein an integrator comprises an amplifier with an admittance element in a feedback path.
  - 5. Polyphase filter according to claim 4, wherein a filter comprises a passive element and wherein an amplifier comprises an operational amplifier.
  - 6. Polyphase filter according to claim 5, wherein a passive element comprises a resistor and a capacitor and wherein an admittance element comprises a capacitor and a conductance element coupled in parallel to each other.
- 7. Polyphase filter according to claim 6, wherein said polyphase filter comprises at least one signal inversion between integrators.
  - 8. Integrator for use in a polyphase filter comprising at least two filters for filtering signals, wherein said filters are coupled to integrators for integrating filtered signals.
  - 9. Receiver comprising a polyphase filter comprising at least two filters for filtering signals, wherein said filters are coupled to integrators for integrating filtered signals.